SL-II MC-1022/1
Time: 07:16 CDT, 22:12:16 GMT
6/13/73

PAO This is Skylab Control; 12 hours 16 minutes Greenwich mean time. Skylab coming up now on acquisition at Goldstone. In the 459th revolution. We'll stand by for this pass over the United States.

CC Skylab, Houston. AOS stateside for 16 minutes.

CDR Roger, Houston. We just went to P40.

CC Roger.

SPT Houston, SPT.

CC Go.

SPT I didn't quite understand what you said about 82B in the last conversation. It's not, they don't mind having the, having darkness cut, close the door, do they, because that's our routine way of operating?

CC Stand by.

CC SPT. Houston. Let me see if I can clarify this for you. What we'd like to avoid is to have one of the 82 Bravo modes be terminated by door closure. So in this case what we want to do is to stop taking photography and close the door about 20 seconds prior to sunset. I'm sorry, stop the mode 20 seconds prior to sunset.

SPT We don't have to close the door manually, then, right?

CC That's affirmative, Joe.

SPT Okay, cause it clearly stated in the mission rules, that the crew was infallible and I wanted to verify that.

CC Roger. We're checking ourselves.

SC (laughter) Hey, Houston, also for information, our onboard radar on (garble) 4M, that's (garble).

CC Roger. Copy.

CC PLT, Houston. For your information, our TM also shows about the - and concurs with yours on reg 4. However, we think it's a transducer problem.

PLT Yeah, I buy that.

CDR Hey, Houston. I'm not using these gimbal angles you've got in here, I'm using the ones that you had me put in before, okay?

CC Roger. That's okay with us.

END OF TAPE

SC It does all kinds of good things for the rates, Houston.
CC Sorry, Pete. Didn't copy that. Say again.
SC He says our gimbal - you can really feel it in here and hear it slosh and finger how much it shows up on the rate needle.
CC Roger. Hang on.
SC We did.
SC Hey, Houston, the EMS is garble. Verify that the GHz power is in fact OFF.
CC Very good. Thank you.
SC Houston, CDR.
CC Go ahead, CDR.
SC I'm going to press right on to step 33. You want to watch, right?
CC Stand by just a second, Pete.
CC Affirmative, Pete. Press on; we're watching.
SC Okay. I got all the right responses here. I just read backwards.
CC Roger, CDR.
SC Okay, step 34 complete.
CC Roger; concur. We watched the DELTA.
CC CDR, Houston. We see you're about 10 minutes from the end of the BMAG 2 drift check. A couple of other little notes, now that you're through some of this busy part here for this pass. We've got the entry SIM and checklist changes for entry that'll be uplinked for you today. Also this evening we're going to uplink a full set of maneuver pads for the entry SIM tomorrow. In fact a slightly different subject with regards to the TV tour today. It turns out we looked at the schedule, and if we did TV 21 as scheduled in the Flight Plan today, that would prevent you from doing the TV tour. However, if you're amenable to getting the tour out of the way, we think that's more important, and we'd like to do that today. So we'd suggest scratching TV21 from your Flight Plan today. That'll give you plenty of tape on the VTR, and you can do the tour at your convenience this evening.
SC Okay.
SC I have more than an hour on the feedbag, and I'll give you a check in just a second.
CC Roger.
CC Skylab, Houston. We're 30 seconds from LOS. We're going to see you at Carnarvon at 13:17.
SC Okay.
PAO This is Skylab Control at 12 hours 37 minutes Greenwich mean time. We've had loss of signal at Bermuda. Skylab passes outside the acquisition ring of Ascension on this revolution - revolution number 460. So we'll have a long LOS, the next station to acquire being Carnarvon, Australia in about 38-1/2 minutes. Paul Weitz is now assisting Pete Conrad with the entry

SL-II MC1023/2
Time: 07:25 CDT; 22:12:25 GMT
6/15/73

minus 7-day checkout of command and service module systems. Science Pilot Joe Kerwin still operating the Apollo telescope mount. We'll come back up just prior to Carnarvon acquisition. At 12 hours 38 minutes, this is Skylab Control.

END OF TAPE

SL-1I MC-1024/1
Time: 08:15 CDT, 22:13:15 GMT
6/15/73

PAO This is Skylab Control at 13 hours 15 minutes Greenwich mean time. Skylab coming up on the Carnarvon, Australia, Tracking Station now. Acquisition there in about 30 seconds; we'll stand by.

CC Skylab, Houston. AOS Carnarvon for 9 minutes.

SC Copy.

CDR Roger, Houston. Would you like the P52? I couldn't get it to daylight. There's too much Earth in the way.

CC Okay; affirmative. I would.

CDR Okay. I got star 37 and star 40. Five balls, NOUN 93 plus 00076 minus 00174 and minus 00084; the time, 13:15:45:00. And I'm going to go ahead and power down the G&N.

CC Stand - Stand by on that, please, Pete. Just a second.

CC Skylab - CDR, Houston. We got to do some uplinks, and also get an E-MOD. If you'll give us ACCEPT as soon as the 52 is over, we can get started on that, and then we can power down the G&N after that.

CDR Got ACCEPT and POO.

CC Roger. Thank you.

CC And, CDR, do you have any information on us on the drift check?

CDR Oh, let me give you both of them.

CC Okay. Go ahead.

CDR BMAG 2 drift check, FDAI-1 NOUN 16 - I mean NOUN 20. 261.61007.84355.05; GDT ATT was 2590 0110 356.9. The total time, 1 hour and 4 minutes.

CC Roger; copy.

CDR BMAG number 1, NOUN 20 261620076235521. GDC ATT, 260.8, 007.8, 356.5; the time, 30 minutes.

CC Roger, Pete. I got both of those.

CDR Do you want your E-MOD at 13:37, or can you take it here?

CC Stand by.

CC Skylab, Houston. The load is in; you can go back to BLOCK. And we are standing by for the E-MOD. We got about 4 minutes left in this pass.

CDR It's coming at you right now.

CC Okay.

PLT Okay, Dick, when you get a minute or two, the PLT's got a couple of items for you.

CC Very good, PLT. Because I have an item for you, and I was trying to figure out where you were. Go ahead.

PLT First item is - Is there any way we can tell if our wardroom heater is still functioning? If that's gone up, good, you could tell us we turn it off and on, because our water has frozen again, and where the window protector was formally warm to the touch when busily washing the windows, it no longer is.

CC Roger. We copy.

PLT Another item. And the second item is - just so I don't forget. How about - but it may be for EVA - this schedule may put the S190 desiccant in the oven, please. And then on either day 27 or 28, another reminder to put the new ones in the camera.

CC Roger. We'll sure put that on your Flight Plan, Paul, and if that's all you got, I got one item on the ATM I'd like to mention to you.

PLT Okay.

CC Okay, talking about S082A. I guess we've had occasions where the OPERATE light has remained on after MODE TERMINATION, and in this next daylight cycle, after you get through with the completion of the time mode in building block 3, there's an opportunity where this might happen. And if it does - if the OPERATE light does stay on there, we'd like you to do a real quick little test for us, and that is throw the 82A FLARE switch to INHIBIT, and then note the status of both the READY light and the OPERATE light. And just tell us what the status of those two lights are next time we have AOS and - -

END OF TAPE

SL-II MC1025/1
Time: 08:22 CDT, 22:13:22 GMT
6/15/73

CC - to denote the status of both the ready light and the operate light and just tell us what the status of the two lights are next time we have AOS and that'll help us find - try to psych out exactly what the problem is.

PLT Okay, we'll try it. Now Joe just came down -- he was running in the time mode. It's been operating almost continuously. Once you start it - When the door first opens it comes up READY. Once you start unload (garble) it usually stays OPERATE. Now Joe just finished that building block that he had and it came up READY at the end of each sequence this time. But I'll check it next time.

CC Okay, good. Thank you.

CC CDR, Houston. We've got the EMOD and we're GO to go ahead and power down.

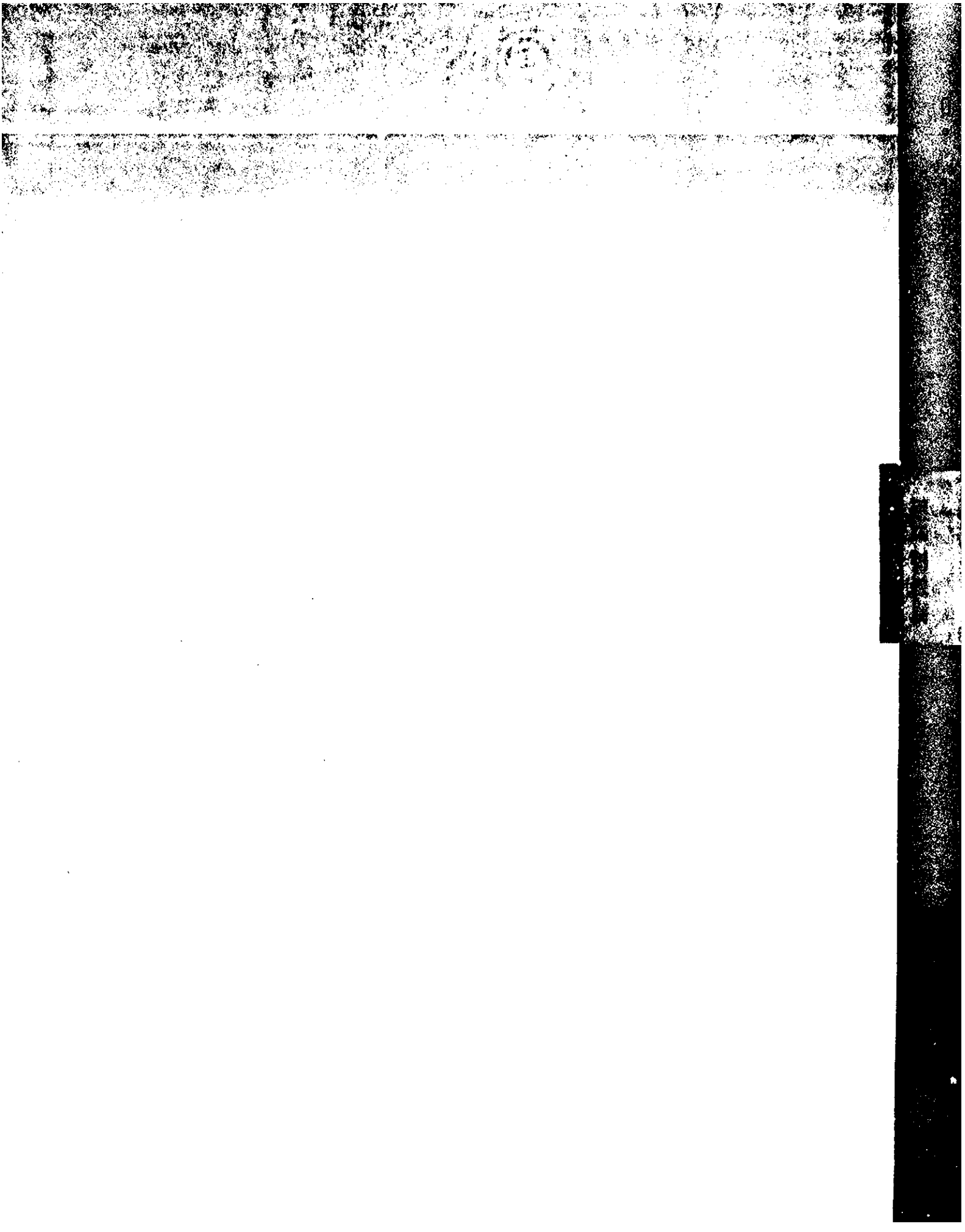
CDR Okay, Roger.

CC We're about a minute from LOS. We'll see you at Guam at 13:31.

CDR 13:31, bye.

PAO This is Skylab Control. We've had loss of signal at Carnarvon. Guam will acquire in about 5-1/2 minutes. The water that's frozen that Paul Weitz was describing is the moisture on the inside of the outer pane of the wardroom window. It does not appear to him that the window heater is working. We'll come back up just prior to Guam. At 13 hours 25 minutes this is Skylab Control.

END OF TAPE



PAO This is Skylab Control at 13 hours 29 minutes Greenwich mean time. We're standing by for acquisition through Guam.

SC Houston, CDR.

SC Hello, Houston; CDR.

SC Hello, Houston; CDR.

CC CDR, Houston. Go ahead; we've got you for 5 minutes.

SC Okay. I wasn't sure whether you wanted me to power down the computer or not. I powered down the IMU. Am I cleared to power down the computer? Do you have to go back to sleep?

CC Stand by just 1 on that, please.

CC CDR, Houston. Affirmative, you're cleared to power down the computer.

SC Okay.

CC And, incidentally, back to the subject of the wardroom window heater. We don't have any direct telemetry that tells us whether or not that heater's on. And the current draw is so low that we have a hard time seeing it. About the only thing we can suggest is to verify the two circuit breakers on panel 614. And if you haven't already tried it, you can try the heater on the opposite bus from the one you have tried and let it sit there for a while and see if it warms up. And one thing we'd like to know is what's the size of the ice spot that's on there now as compared to what it was the other day before it thawed?

SC Unfortunately, the whole area is bigger. The ice spot - the ice cube is smaller; it's about three-quarters the size of a dime. However, where we formerly had a little steamy vapor on the window, it's now all crystalized into a nice frosty spot, approximately 2 to 2-1/2 inches in diameter.

SC Okay. Those breakers were closed, Dick. Uh, I'm going to go to the other bus for awhile; let's see what happens.

CC Okay. I assume you've been on BUS 1. Is that right?

SC (garble) I notice we've been on BUS 2.

CC Okay. Fine. Thank you.

SC Say, Houston; CDR.

CC Go ahead.

SC (Garble) the command module housekeeping 7 tonight, running that loop for an hour, any chance of cutting that heater back in?

SC Is it something we need to worry about?

CC Stand by.

SC You don't have to answer it right now. I just thought I'd pass it along.

CC CDR, Houston. In answer to your question, we're not concerned about the heater operation during the check; however, we do want to make sure - I think the last step, which I think is a pen and ink in your checklist for that CM7, is to make sure the circuit breaker on that heater is put to OPEN, but no problem during the check.

SC That secondary heater has a fuse back in the service module; it doesn't have any circuit breaker.

SC We talking about the same heater?

CC Maybe not. I'll get the answer. We're going LOS, CDR. We're going to see you at Goldstone at 13:55. Be advised our initial look at the command module is looking real good. The team is going to go off and get together and look at some of the backroom data, and later on this afternoon we'll give you a good briefing as far as the systems status that we saw on the ground here today.

SC Okay. Where's your meeting?

CC Clancy's office. Can you make it?

SC No, I thought it might be some place else. Bye.

CC (Laugh).

CC CIRCUIT BREAKERS, SECONDARY COOL HEATER, CONTROLLER MAIN A to OPEN.

SC Got you.

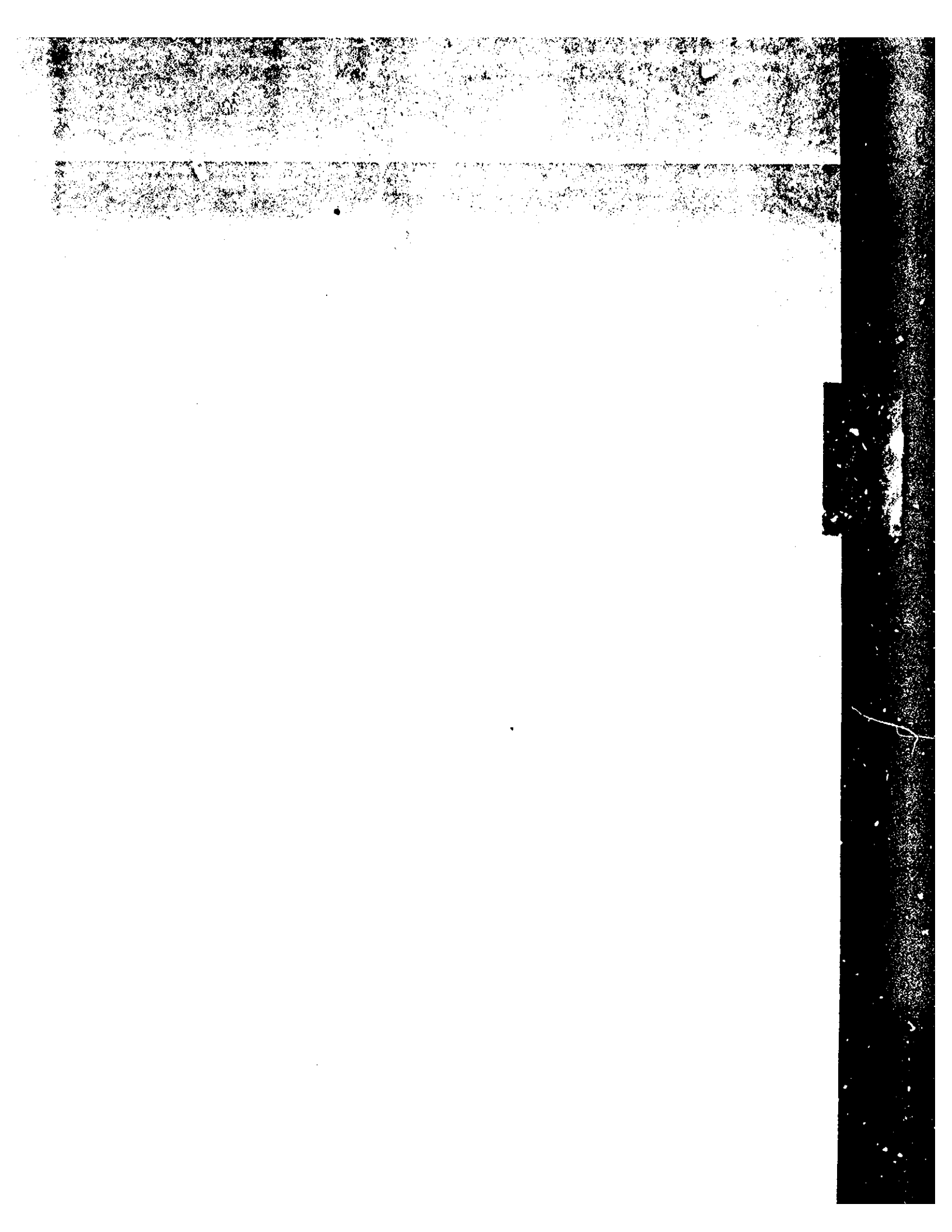
PAO This is Skylab Control at 13 hours 39 minutes Greenwich mean time. We've had loss of signal with Guam. Next station to acquire will be Goldstone in about 15 minutes. Pete Conrad winding up now this 4-hour checkout of command and service module systems. The initial look here on the ground indicates all of the Apollo command module systems are looking good. Science Pilot Joe Kerwin has finished his initial, Apollo Telescope Mount run of the day and should be having lunch about now.

END OF TAPE

SL-II MC-1027/1
Time: 08:40 CDT, 22:13:40 GMT
6/15/73

PAO - - and Pilot Paul Weitz will begin another run of the Apollo telescope mount about right now. He has switched the wardroom window heater to another BUS - another electrical distribution system - to see whether he can get that ice to melt. Reports a very small piece of ice about the size of a dime. However, there's a larger frosty area 2 to 2-1/2 inches in diameter along the window that they would like to melt and get rid of. We'll come back up just prior to acquisition at Goldstone. At 13 hours 41 minutes this is Skylab Control.

END OF TAPE



SL-II MC-1028/1
Time: 08:52 CDT, 22:13:52 GMT
6/15/73

PAO This is Skylab Control at 13 hours 53 minutes Greenwich mean time. Skylab coming up now on acquisition at Goldstone. Flight Director Phil Shaffer and his group of command and service module flight controllers have left the control room, now, for a meeting to go over all of the CSM data they've seen. The crew will get a report on that checkout later today. Initial look shows the data is very good and systems are good. We'll stand by for conversation at Goldstone.

CC Skylab, Houston. We're AOS stateside for the next 15 minutes.

PLT Okay, Richard. (Garble) the OPERATING light stayed on. I turned the flare (garble) and blink, on came the READY light and out went the OPERATING light.

CC Thank you very much, Paul.

PLT I'm back to FLARE ENABLE now. And the READY light stayed on. Next time I (garble) turn the FLARE switch to INHIBIT while I'm running and see if it goes from OPERATE to READY like it's supposed to. Is that all right?

CC Roger. That's affirm.

PLT Thank you.

CC And Skylab, Houston. Back to the question that we were talking about, about the heater up in the command module. It turns out that the fuse that you referred to is in the heater portion of the circuit. And it is in the service module. The problem, we think, is in the control loop probably, or possibly a shorted switch. And the circuit breaker that I was referring to is on Panel 5. It's ECS, secondary coolant loop heater control MAIN A circuit breaker, and it is listed in your systems checklist. And you'll get to that on the housekeeping check tonight and the last step - or one of the steps in there is to - when you leave the command module it'll be OPEN.

CDR Right side. I'll remember that. Okay. Fine. Thank you.

CC Roger.

CC And Skylab, Houston. For your information, this stateside pass, you're passing over the west coast up around Salem, Oregon. You're going to pass over just to the south of the Great Salt Lake. You've got to go over a portion of the Grand Canyon, and going to hit the Gulf of Mexico coming away from the United States between Houston and Victoria.

SC Roger. Thank you.

END OF TAPE

SL-II MC1029/1
Time: 09:06 CDT, 22:14:06 GMT
6/13/73

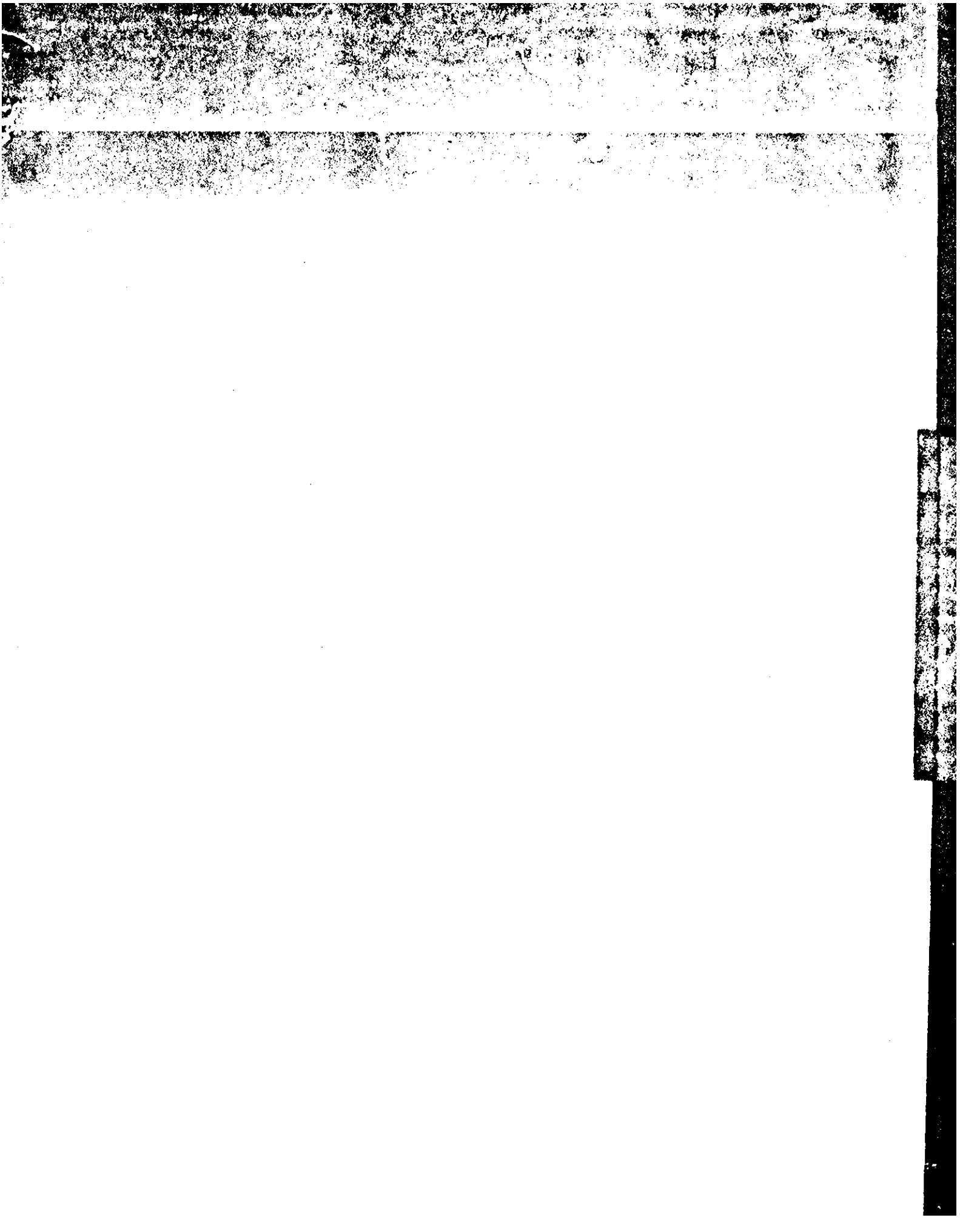
CC Skylab, Houston. We're 1 minute to LOS. Vanguard coming up at 14:20 and we plan to dump the data tape recorder there.

CC Skylab, Houston be advised we understand in active region number 1 there is a subnormal flare that is now in progress and two of the instruments are recording information from it.

SC Good.

PAO This is Skylab Control; 14 hours 11 minutes Greenwich mean time. The Merritt Island Florida tracking station has had loss of signal with Skylab. Next station to acquire will be the Vanguard tracking ship off the east coast of South America in about 8-1/2 minutes. Pete Conrad is in his lunch period now. Joe Kerwin just winding up lunch ready to begin some housekeeping chores and Paul Weitz operating the Apollo telescope mount. We'll come back up just prior to acquisition at the Vanguard. At 14 hours 12 minutes Greenwich mean time this is Skylab Control.

END OF TAPE



PAO This is Skylab Control at 14 hours 19 minutes Greenwich mean time. Skylab over South America, coming up within range of the tracking ship, Vanguard. We'll stand by for that pass.

CC Skylab, Houston. We're AOS Vanguard for 8 minutes.

SC Houston, Skylab. I'd like to - you to be the first to know that the PLT is the proud father of a genuine flare.

CC Very good.

SC Just about the time you called, he got a high PMEC count, and this time it was confirmed by image intensity count being over 300, by a bright spot occurring on the X-ray image. It involved the 1 and the 4 positions and was confirmed - the M16 - it was confirmed by a very bright spot on the XUV monitor. He decided to slew the H-alpha. We found a flare in active region 31, a factor of 10 brighter than any other plage we've seen. In other words, it was unmistakeable once it happened. We were on the flare, he got probably a minute and half or 2 minutes of flare rise, we're at flare fall now, and if the ATM would like us to do post-flare on the next rev, the PLT is willing to cancel his housekeeping (garble) and all that. Not cancel; just delay.

SC The maximum PMEC was 840, Houston. We are in the high mode.

CC Roger that. And if you would be willing to delay your housekeeping 7J, which I know is very important, we sure would appreciate it, because we've been looking forward to catching one of these.

SC So have we; we're all just as proud as new daddys.

CC Good show.

SC Like I told them before we went, he had six hands up there as soon as he announced it.

SC Houston, SPT. We've got a bit of a problem here determining the end of flare fall and could use some friendly advice from the ground, because we're now hearing the South Atlantic anomaly, and our PMEC isn't very useful to us anymore. As a matter of film remaining, I'd like to know whether the PIs would like us to continue flare fall for this whole pass or to go in to post flare?

CC Roger. Stand by.

SC We still have very definite indications on the visual diplays. I would prefer continuing flare fall.

CC Roger. Stand by, please.

CC SPT, Houston. We agree with you; we'd like to continue flare fall. We believe that you can use the XREA to monitor the flare during this period, possibly.

And also, we think that S056 is maybe hung up. We'd like you to go STOP/START on that for us, please.

SC Okay.

CC Roger.

SC Houston, SPT.

CC Say again, please.

SC This is SPT. The S055 has kicked the detectors off a couple more times during this mirror light scan. And we're running now with detector 5 off; that's for their information.

CC Copy, Joe.

SC And can they verify whether S054 is complete yet?

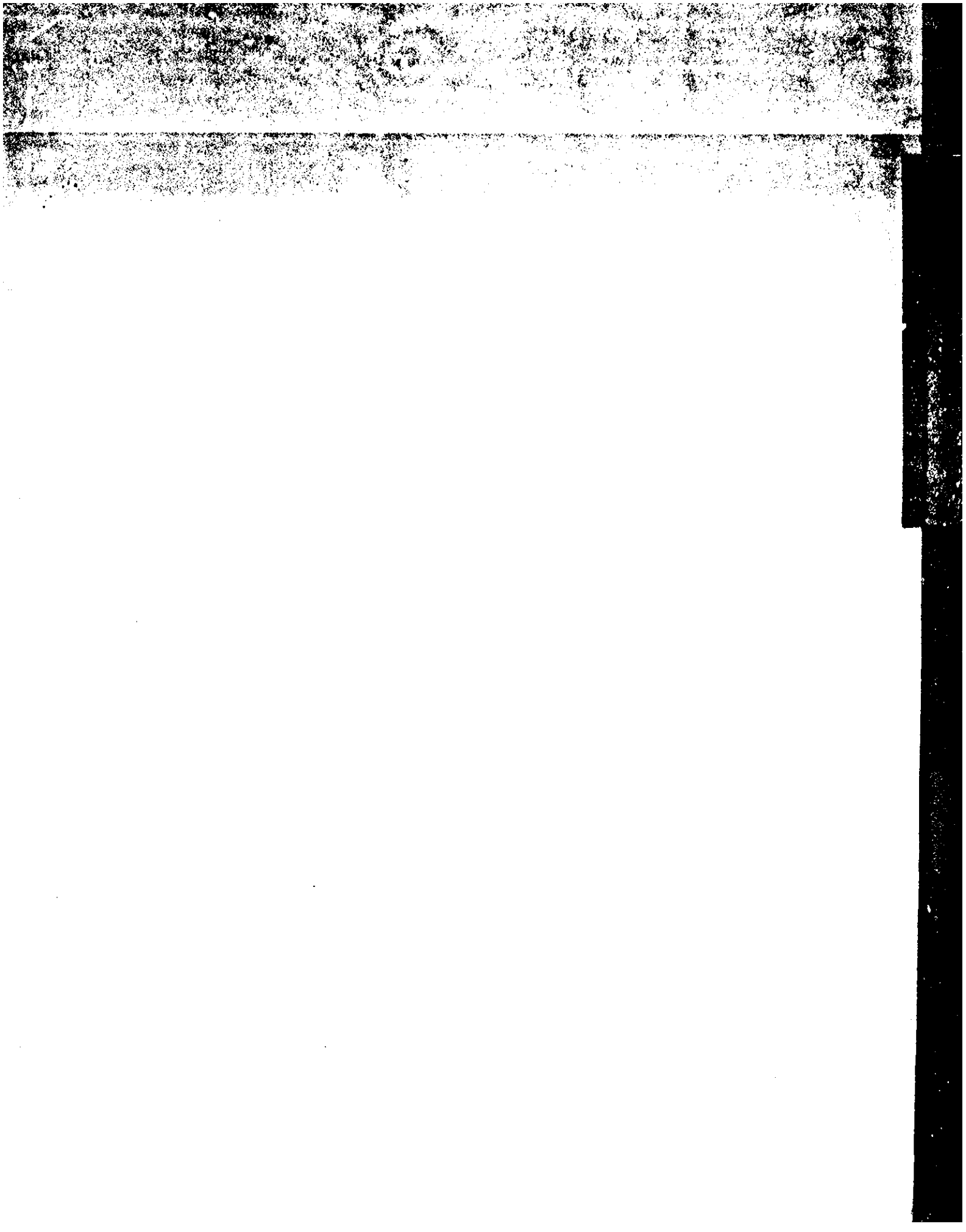
CC SPT, Houston. Affirmative, 54 is complete. We'd like you to go the flare fall portion, and it appears that 56 is hung up again. If you'll help us out again, we'd appreciate it.

SC Okay. Thank you.

CC Skylab, we're 1 minute from LOS. We're going to have a long LOS period. See you at Goldstone at 15:32. So have fun.

SC Bye.

END OF TAPE



SL-II MC-1031/1
Time: 09:27 CDT; 22:14:27 GMT
6/13/73

PAO This is Skylab Control; 14 hours 29 minutes Greenwich mean time. Vanguard has had loss of signal. The Skylab will not be acquired at the Australian sites or by Guam, or Hawaii on this revolution number 461. So we will have a very long LOS. About an hour and 2 minutes. Goldstone will be the next station to acquire. As you heard, Science Pilot Joe Kerwin announced that the Pilot, Paul Weitz, was the proud father of a genuine flare. Weitz is operating the Apollo telescope mount. This is the first genuine flare of the Skylab II mission. There have been several subnormal flares observed, but this is the first ganuine solar flare of this mission. It was impressive enough that Joe Kerwin volunteered to delay his housekkeeping chores to assist Weitz in the ATM operation, a not insignificant sacrifice since his housekeeping chores were 7J, his weekly shower. We'll come back up prior to Goldstone in about an hour. At 14 hours 31 minutes Greenwich mean time, this is Skylab Control.

END OF TAPE

SL-II MC-1032/1
Time: 09:42 CDT, 22:14:42 GMT
6/15/73

PAO - This is Skylab Control at 14 hours 43 minutes Greenwich mean time. An Apollo telescope mount briefing will be held in the JSC News Center at 10 a.m. central daylight time today. There will be 7 participants, ATM experimenters and managers from the Marshall Space Flight Center. That's a briefing on Apollo telescope mount experiments at 10 a.m. central daylight time today in the JSC News Center. The television now on the screens in the News Center is a playback from tracking stations of video tape that was dumped earlier today. It consists of Apollo telescope mount television and television of experiment ED31, a student experiment on bacteria and spores. We're still 47-1/2 minutes away from acquisition at Goldstone. At 14 hours 44 minutes Greenwich mean time, this is Skylab Control.

END OF TAPE

SL-IL-MC-1033/1
Time: 11:08 CDT; 22:16:08 GMT
6/15/73

PAO This is Skylab Control at 16 hours 7 minutes Greenwich mean time. We accumulated 9 minutes of tape during that news conference, 6-1/2 minutes over the Goldstone and Texas stations. And 2-1/2 minutes at the Vanguard tracking ship. We're about 58 minutes away from acquisition at Hawaii. We'll play the tape for you now.

CC Skylab, Houston. AOS at Goldstone, 11 minutes.

SC Roger, Houston.

CC Skylab, Houston. Getting back to a question that you guys asked awhile ago. On the times we've been giving you for the Horns and also for the South Atlantic Anomaly, turns out that our information about the radiation shows naturally that the radiation belts drift around and the numbers we've been sending up to you, are our best information at the time. Now we've got a couple of choices, one is that we can take a look at some recent data, something that we could look up here in real time and try to pad it a little bit in either direction, or just advise you of this fact and continue to send up the times under the same ground rules. But we do not have any better data that's available to us in a short period of time and probably the best data is coming from your work and is going to take quite a bit of time to analyze that. That looks like a kind of next mission task. Out.

SPT Okay, Housto.. The situation has modified itself somewhat since we related that to you this morning. Based on our knowledge now that with the real honest-to-gosh flare, the energy intensity count, the X-ray image, XUV monitor and a number of other things tend to confirm what's going on it, so that indicates our only problem is reacting to off-console and whether to set the tone light switch to enable or not when you're off the console. And I would suggest that we live with the estimates as you've been giving them to us. And in addition you might, perhaps, consider setting up a committee to try to make the belts stop moving.

CC I think that's a good suggestion, Joe, and maybe that committee can do its work and do a little bit better job for the next crew.

PLT Okay. Say, Houston. 56 keeps hanging up, I've been watching it, stopping and starting it. I'm restarting it for the 5th time on this pass.

CC Roger. Adam copies.

PLT Houston, the CDR says that he's tearing up the nasty letter he had written to Dr. Van Allen.

CC Roger.

CDR (garble) committee that Dr. Kerwin suggested.

PLT Dick I've been logging the frame counter reading and the filter indicatior at which 56 has been stopping, hanging up. Does anybody care about that, do they want it or can I forget about it?

CC Stand by. Yes, sir, we sure would like it, go ahead I'm copying.

PLT Okay. Frame counter at the start of this pass was 2777. It hung up with a count of 62 on filter 3. Next time it hung up with a count of 38 on filter 3. Next time with a count of, and I can't figure this one out, with a count of 37, in again at filter 5. And the last time was frame count of 22 on filter 3.

CC Roger, Paul. Copy.

PLT And I've also finally found a secret for the READY light for 82A. Doesn't go out as long as you have the flare enabled, I mean the READY light does not - -

END OF TAPE

SC They've also barely found the secret for the READY light for S2 A. It doesn't go out as long as you've got the flare enabled. I mean the READY light does not come on, at least the few times I've tried it here. But if I inhibit the flare and terminates the exposure, the READY light comes on each time and so forth.

CC Roger. Copy, Paul.

SC (Garble) data pointer at S056. The first half was 07 on filter 3.

CC Copy.

CC And, PLT; Houston. I'm not sure what you have in mind about your schedule for the rest of the day to get in your HK-7 Juliet. But if you need to - to not do the next ATM pass that you're scheduled for, in order to accomplish that, that's fine. It's your choice. Or if you want to fit it in, as you guys best see fit, press on.

MCC I'll let him in with me.

SC We'll work something out.

CC Rog.

SC (garble) 56 hung up again on its screwy indication. It (garble) one frame to 2706 and indicates (garble) 5.

CC Roger.

CC Skylab, Houston. Initial thoughts on the 56 hang up are that it's probably a mechanical misalignment that somehow has taken place in the camera. We've got no way to - in the magazine. We've got no way to help you out on it now, except to continue - continue to restart it. However, we think it should be corrected when you replace the 56 camera on the EVA.

SC Okay.

CC Skylab, Houston. We're 45 seconds from LOS. We're going to see you at Vanguard at 15:58. We're going to dump the data recorder at Vanguard, and we're cleaning up the last of the VTR downlink here at Goldstone. So anytime at your convenience after this, the VTR is yours with 30 minutes available tape on it.

SC Okay. We gave you some of the notes. (Garble) sorry to bother you (garble) notes yet.

CC Paul, that was a little broken up. I think I copied that you put some of the flare information on H-ALPHA and XUV MON on the VTR. Is that Charlie?

SC That's right.

CC Very good. We (garble) look at it.

CC Skylab, Houston. Vanguard 7 minutes.

SC Roger.

CC Skylab, Houston. Be advised that NOAA has reported that the flare that you have taken data on has been classified as 1 bright, and it's an M-4.
SC Okay, thank you.
CC Roger. Thank you.
SC Houston, does that mean we can keep it, or do we have to throw it back?
CC It's your choice.
CC I think we've already got it anyway.
SC (Static) Somebody stepped on it while we were gone at night.
CC Sorry, we broke off for a second. I didn't copy that one.
SC It wasn't worth repeating. Never mind.
CC Roger. Never minding.
SC I believe that's properly nevering mind.
CC PLT, Houston. Due to the film remaining in 54, we request that after you complete the sequence you're in, discontinue post - flare fall operations with S054. And also, I have a change in the flare guidelines that comes up to you on the solar activity pad for 54. The - to be used for the next 2 days - Any future flares, the flare mode should be M-3IP16, - M3IP16.
CC Okay. You want this c[illegible] made on this one now, and it'll be reflected on the (whi[illegible] solar activity (garble).
CC Roger. We want to discontinue 54 operations now on this one and use those flares in the future. We're going LOS here at Vanguard. We're going to see you at Hawaii at 17:06.
SC All r'ght.
PAO This is Skylab Control at 16 hours 17 minutes Greenwich mean time. That's the end of the tape that was accumulated over the States and the Vanguard. Skylab is 48 minutes away from acquisition at Hawaii. At 16 hours 18 minutes, this is Skylab Control.

END OF TAPE

PAO We have acquisition of signal. This is Skylab Control at 17 hours, 4 minutes. We'll stand by for the call from spacecraft communicator Dick Truly - presently on duty.

CC Skylab, Houston we're AOS at Hawaii for the next 6 minutes. Be advised this pass we're up to our old tricks - we're updating some rate gyro drift compensations. And we'll probably be doing this both at Hawaii and Vanguard and then we'll update your onboard message telling you what they are.

CC Skylab, we've completed our uplinks on the rate gyro update so we won't have to do any at Vanguard. No response required.

CC Skylab, Houston. We're about 30 seconds from LOS. Vanguard at 17:34.

SC Okay.

SPT Okay, B-channel M171 postrun. Oxygen is 72.40. Water is 4.51; CO2 is 2.03. They're all changing slowly.

CC Hey, Joe. Make sure you're on B-channel.

PAO This is Skylab Control at 17 hours 12 minutes 40 seconds Greenwich mean time. We have lost signal at the Hawaiian tracking station. Our next acquisition of signal is at Vanguard in approximately 21 minutes. The flare spotted earlier this morning was the first major flare to be spotted on the Skylab mission after nearly 3 weeks in the air. The flare was placed in active region number 31 which is near the center of the side of the Sun now facing Earth. And it was in the upper right-hand quadrant of the Sun, been very near the center. Although the astronauts had been informed by teleprinter that "probe probabilities are highest yet", active region 31 was not listed as an area of high probability. The solar flare - sudden disturbance of the Sun's surface - that emits high energy radiation into space was the size expected only about once every 2 to 3 months during a period of low activity on the Sun. We are presently in a period of such low activity. The flare was classified as a 1 bright M4 - that was number 1 bright M4 - which describes both its optical brightness and its radiation output. A 1 bright solar flare covers an area of at least 2 square degrees - that is an area about 1.4 degrees on a side, and emits bright light. The rating scale for area runs from 0 to 3 on a logarithmic scale. One indicates between 2 and 5 squares degrees. That is an area from approximately 1.4 degrees on the side to approximately 2.1 degrees on the side. The bright rating is a rating that one of three ratings available for optical brightness. The others are dull and normal, so "bright" is the brightest of optical in optical visibility. In addition the M4 rating

indicates the X-radiation class of the solar flare at peak intensity. The M class is a moderate class, C class is anything that can be detected - X is a very large class - M is a moderate class. The 4 rating indicates the number of times one has to multiply the ergs per centimeter square per second energy of the solar flare, so that this solar fare was producing 4 times 10 to the minus 2 or 0.04 ergs per centimeter squared per second. That's the total X-radiation at peak intensity. The solar flare began at 14:01 GMT or approximately 9:01 Central daylight time this morning. It was spotted by the ATM console and Pilot Paul Weitz. It reached its optical brightness peak at 14:09 or 9:09 central daylight time. The X-ray maximum was at 14:13 or 9:13 central daylight time and the approximate time of ending was about 14:51 GMT or 9:51 central daylight time. To repeat those times the solar flare began at 14:01 GMT, reached it's optical peak at 14:09, it's X-ray peak at 14:13 and came to a conclusion approximately 15 minutes after it began at 14:51. At the present time the crew is engaged in the M092, M171 experiment with the subject, Commander Pete Conrad, and Science Pilot Dr. Kerwin is observing. We will have acquisition of signal again in about 17 minutes and 25 seconds. This is Skylab Control at 17 hours 16 minutes 27 seconds Greenwich mean time.

END OF TAPE

Longest Space Duration

SL-II MC-1036/1
Time: 12:32 CDT, 22:17:31 GMT
6/13/73

PAO Skylab Control at 17 hours 31 minutes 29 seconds Greenwich mean time. Recovery operations control room here at Skylab Mission Control reports that USS Ticonderoga, the ship that will participate in the recovery operation, carrying the Skylab Mobile Laboratory, departed the port of San Diego this morning at 16:00 Greenwich mean time, or 11 a.m. Central Daylight Time. It is presently enroute to the recovery area, to the southwest of San Diego. Recovery is still, of course, not until a week from today, early in the morning. I believe the time schedule is approximately 8:50 in the morning, Central Daylight Time. We are now waiting for acquisition of signal at the Vanguard ship station and we expect that in about a minute and a half from now, when space raft communicator Dick Truly will call the crew. We'll remain live for air-to-ground.

CC Skylab, Houston. We're AOS Vanguard for 8 minutes.

CC Skylab, Houston. Be advised we're going to, that ASCO's going to command a NAV update to staff.

SC (garble)

SC Houston, say again, please.

CC Roger. We need to have the DAS, we're going to command the NAV update.

SC Okay.

CC Skylab, Houston. We're through with the NAV update, the DAS is yours again.

CDR Roger, Houston. Thank you.

CC Roger.

CC Skylab, Houston. We're 45 seconds from LOS, Hawaii at 18:41.

PAO This is Skylab Control at 17 hours 44 minutes 18 seconds Greenwich mean time. We have lost signal at the Vanguard station. Our next acquisition of signal is nearly an hour from now, 56 minutes and 39 seconds. We have received a revised record time for the longest single mission in space. A check of our records maintained by the Library of Congress indicates that the Soviet Space Station SO-US 11 was manned during a 23 day 18 hour 22 minute total mission in 1971, that's 570 hours and 22 minutes, 23 days 18 hours and 22 minutes for a total mission in 1971. The Skylab crew expects to surpass that mark early Monday, at 2:22 a.m. Central Daylight Time, June 18th. This would make Skylab, the first Skylab mission the longest duration in space for man thus far. That's at Monday at 2:22 a.m. Central Daylight Time, to surpass the record of Soyuz 11 set 2 years ago. This is Skylab Control at 45 minutes 24 seconds after the hour.

END OF TAPE

SL-II MC-1037/1
Time: 13:24 CDT, 22:18:24 GMT
6/15/73

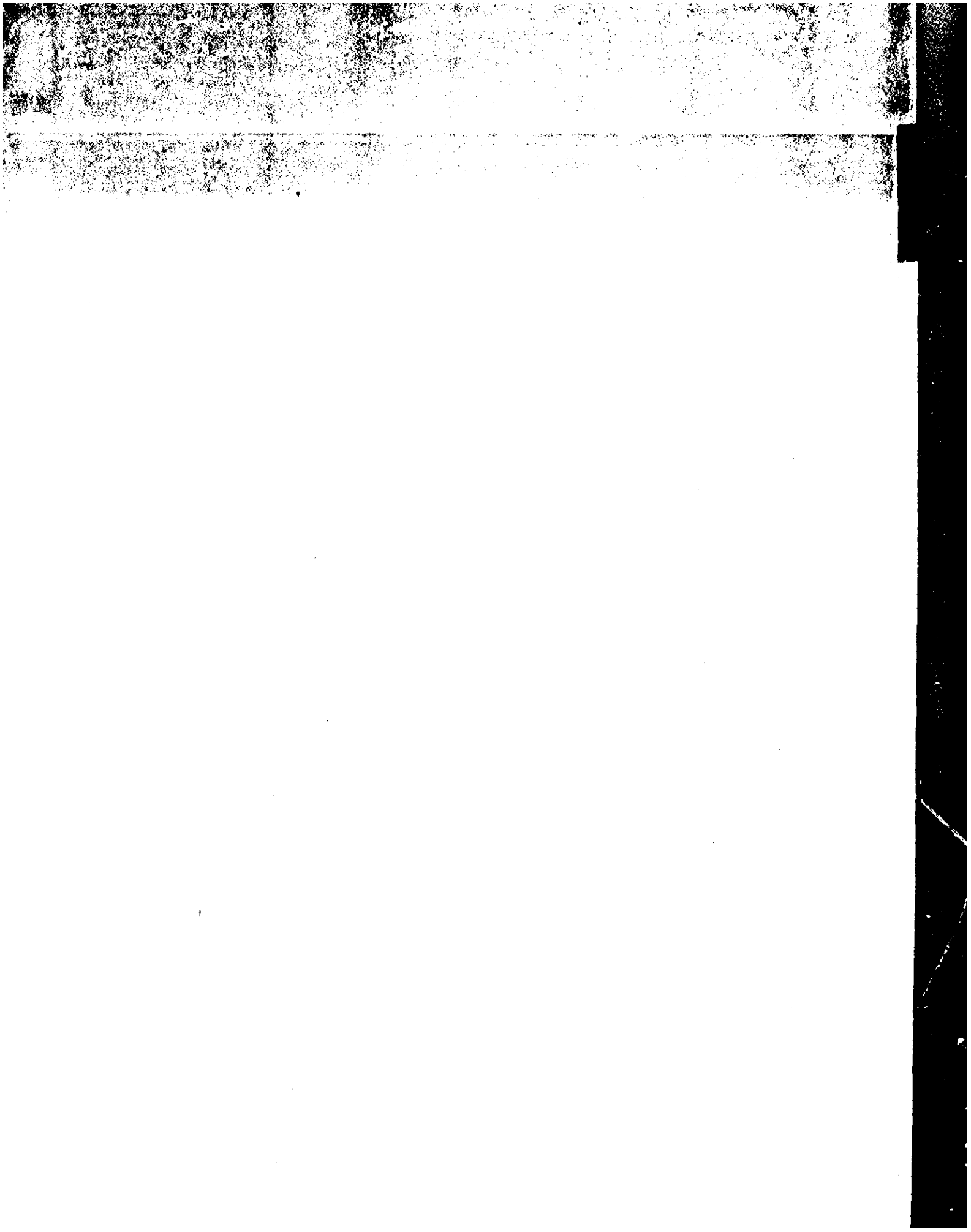
PAO Skylab Control at 18 hours 23 minutes and 39 seconds Greenwich mean time. We'd like to announce that there will be a solar flare activity television - freeze frames of the 4 frames of the solar flare activity spot of this morning. That will be at 1:30 p.m. central daylight time in the briefing room, in building 1. Present for the briefing will be Dr. Guisseppi Vaiana, one of the investigators on experiment S054. He is with American Science and Engineering of Cambridge, Massachusetts. Dr. Vaiana will be available to discuss the freeze frames that will be pictured at 1:30, approximately 12 minutes total time, four separate frames. This is Skylab Control, at 18 hours 24 minutes 22 seconds Greenwich mean time.

END OF TAPE

SL-II MC-1038/1
Time: 13:28 CDT, 22:18:28 GMT
6/15/73

PAO Skylab Control, at 18 hours, 28 minutes, 30 seconds Greenwich mean time, approximately 1 minute to the beginning of the solar flare activity television and discussion and briefing in the briefing room, room 135 in building 1. Dr. Guiseppi Vaiana will be available, one of the investigators on S054. S054 is the x-ray spectrographic telescope. Dr. Vaiana of American Science and Engineering of Cambridge, Massachusetts, will be available for discussing the four freeze-frames to be shown at 1:30 central daylight time. That's a little less than a minute from now. This is Skylab Control at 29 minutes, 28 seconds after the hour.

END OF TAPE



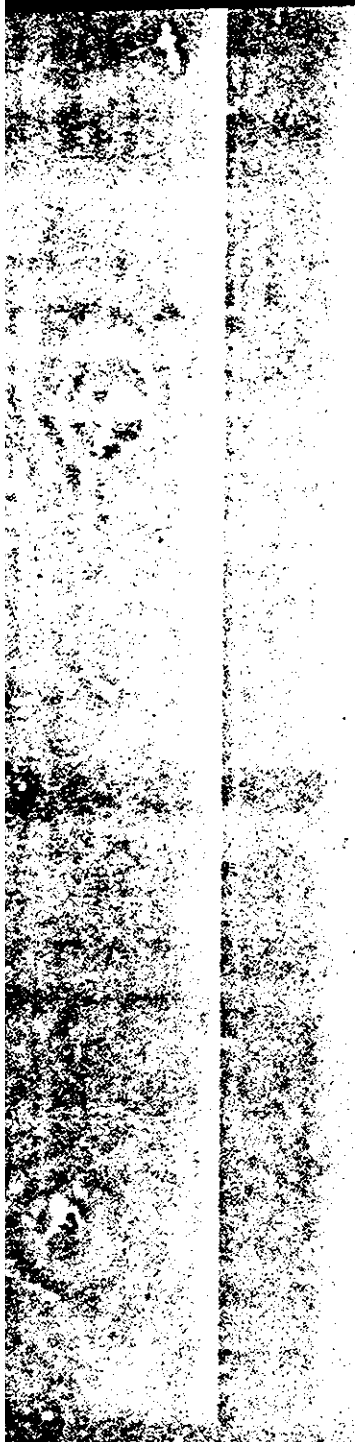
SL-II MC1039/1
Time: 13:57 CDT, 22:18:57 GMT
6/15/73

PAO ... Skylab Control at 18 hours 57 minutes 49 seconds Greenwich mean time. We are going to have some replay of the air to ground over Hawaii. Very little said aboard on the air to ground except one important announcement which I'll mention before we start playing it. Skylab is presently traveling southeast on a descending node over the South Pacific, having just crossed the equator a short time ago. A review of this mornings entry number 7 - entry minus 7 checkout of the command module systems which lasted several hours has now been completed. The flight team reports very good results from the checkout conducted by Skylab Commander Pete Conrad, assisted by Pilot Paul Weitz this morning. The entry minus 7 checkout tests basic elements in the guidance, navigation, and communications systems. The gyros used to guide the spacecraft during its return from the Skylab space station were tested as was the steering control for the main engine or service propulsion system of the command module. This morning's checkout included a procedure to aline the command service module's attitude control system. Conversations between flight controllers and astronauts in the command module are used - the command module's VHF radio rather than the S-band system usually used for Skylab communications with the ground. The VHF radio will be used during the reentry operation. The computers were also brought on line for the guidance and navigation tests and they performed very well. Only one deviation from normal was recorded during the checkout. Differential clutch currents were at off-scale low. The differential clutch is connected to the motors that move the service popuslion system engine and permits that engine to be shifted in different directions. Although the readings were off-scale low it is believed that this reading was an anomaly due only to a minor failure in the telemetry data rather than to an actual condition aboard the command module. Flight controllers are now demonstrating that it is now, in fact, an error in instrumentation rather than an error in the operation of the differential clutch. Several hours will be spent early tomorrow simulating the actual entry, beginning with the - beginning with undocking and going through the deorbit of the spacecraft. That'll begin early this morning - approximately at 6 a.m. - running through a good part of the morning hours. We have an announcement on EVA for Skylab mission. Tests have been continuing on the thermal shield material used on the parasol now deployed on the orbital workshop. This material, an aluminized Mylar nylon laminate with the nylon facing the Sun, deteoriates in strength due to exposure to ultraviolet rays. Samples have been exposed to simulated Sunlight at the Johnson Space Center, the Marshall Space Flight Center, the Lewis Research Laboratry, the Goddard Space Flight Center and

TRW. All tests verified the material is satisfactory for retention in place during the unmanned period without jeopardizing the workshop. Therefore, a decision has been reached not to deploy the twin-pole thermal shield. That is - not to deploy the twin-pole thermal shield during the planned EVA, Tuesday, June 19. The normal EVA to retrieve the ATM film will continue to be scheduled for the morning of Tuesday, June 19. Plans are for the replacement of the parasol early in the next Skylab manned mission with the twin-pole thermal shield. A replacement parasol with an improved thermal shield material will be stowed on Skylab III - the next manned launch as a backup to the twin-pole device. To repeat, that is the evidence from a number of tests conducted on that parasol show that it is not necessary for it to be replaced at this time for the unmanned period, but there will be a replacement using the twin-pole thermal shield during - the plan to replace it during the next Skylab manned mission with that twin-pole thermal shield. The normal EVA to retrieve ATM film will be conducted Tuesday, June 19 in the morning. You will hear approximately 5 minutes of air to ground. One of the things that comes up on the air to ground is an announcement to the crew that there is a burning tanker off the west coast of Chile - located at approximately 44 degrees south - 75 degrees west. The crew has been asked to take handheld photography out of the window if possible of the tanker, which is located approximately 150 miles north of the groundtrack of Skylab. They'll be reaching that point in a few minutes just before they reach acquisition of signal at Vanguard. The time of closest approach to the tanker is 19 hours 13 minutes and 55 seconds, or approximately 9 minutes - approximately 11 minutes from now. This is Skylab Control. We are now replaying the air to ground from -

END OF TAPE

Tanker Burning



SL-II MC-1040/1
Time: 14102 CDT, 22119:02 GMT
6/13/73

PAO 19 hours 13 minutes and 55 seconds, or approximately 9 minutes from now - I'm sorry, approximately 11 minutes from now. This is Skylab Control. We're now replaying the air-to-ground, from the Hawaiian Tracking Station, taking place a few minutes ago. Here is the air-to-ground.

SC Skylab.

CC Skylab, Houston at Hawaii for 10 minutes.

SC Roger. This is the SPT. Do you want real-time television this time, Dick?

CC Stand by.

SC Okay. I put some on the tape. That's good enough or I'll stand by.

CC Negative, I get the word that we do desire real-time TV on this pass, Joe. And I have one note here to read to you guys.

CC Skylab, Houston. We show indications that the star-tracker is unlocked. We'd like you to attempt to reacquire for us. And I have some information I'd like to pass up to somebody that's going to be free. We have a photographic target of opportunity, coming up between this LOS and the Vanguard AOS, that I'd like to read to you.

SC Go ahead.

CC Roger, Pete. We've had reports that there's a large tanker that's burning very close to the - or off the west coast of Chile. The coordinates are 44 degrees south and 75 degrees west, and your time of closest approach is - on this rev is going to be at 19:13:55. And if possible and one of you is free, we'd like either Hasselblad or Nikon photography, whichever you think best, handheld out the window. We think the tanker probably will be about 150 miles north of your groundtrack.

SC I see (garble) of our ground track. I would love to catch that (garble). Up in the SCS, I belive our wardroom window is looking further and further south Okay?

CC Roger.

CC Skylab, Houston. Back to the subject of startracker - G&N says you guys have had a star presence indication. We think it is locked on a particle, and I've got an outer gimbal number here that I'd like to read to you.

SC Okay. Come ahead, Houston.

CC Stand by just a second. I got it. Skylab, Houston. The inner gimbal is plus 0284; outer gimbal plus 2017.

SC Okay. I copy that, Houston. Just a few minutes ago, when I was looking at the coronagraph, there was a veritable storm of particles over Vanguard. I don't know how large they were, but they were bright enough to cause the vidicon to cycle up and down dramatically. I don't know what they were due to.

CC Roger. I understand.

CC Skylab, Houston. On the venting, we are continuously venting some hydrogen out of the command module that we've been aware of. It is possible that wemay have vented some 02, but we're not aware of that or any other vent.

SC Okay. Tell the guys - In the command module, the oxygen was 870.

CC Roger. Copy.

CC Skylab, Houston. We're 1 minute from LOS. Vanguard at 19:12, and we're going to dump the data recorder there.

SC Okay.

PAO That's the conclusion of the replay of conversation between the Skylab astronauts and the ground at the Hawaiian Tracking Station just passed. I have an additional announcement on the deployment of the - the nondeployment of the next parasol. William Schneider, the Skylab Program Director, will be available for a briefing at 4:30 p.m. central daylight time. hat's 4:30 p.m. central daylight time in building 1 at the Johnson Space Center. He will be available to discuss the reasons for not deploying the twin pole thermal shield at this time and any other subjects that may be of interest. At the present time we're about 4 minutes from acquisition of signal at Vanguard. Last time acquisition of signal did come a bit earlier than we'd expected, a couple minutes early. And we'll be coming back up again in about 2 minutes. This is Skylab Control at 7 minutes - 8 minutes after the hour.

END OF TAPE

Hard to find Tanker

PAO [illegible] Skylab Control at 19 hours 11 minutes 5 seconds Greenwich mean time. At the present time we're approaching the Vanguard tracking station. In about 2 minutes we expect to have an opportunity to take photographs of the burning tanker that is off the west coast of Chili at 44 degrees south, 75 degrees west. The crew has been asked to take pictures either using their 35-millimeter Nikon or their 70-millimeter Hasselblad camera out of one of the windows of the spacecraft - probably the wardroom window, if it is possible to get photographs. We'll heat, I'm sure, at Vanguard one way or the other whether they're taking those photographs. To remind you, there is a Change of Shift Briefing tentatively scheduled for 3:15 p.m. with Charles Lewis, the flight director that's just gone off. Don Puddy is now on duty. Spacecraft communicator is William Thornton. He'll be talking to the crew in just a few moments, as they get acquisition of the signal at Vanguard. This is Skylab Control staying live with air-to-ground from Vanguard.

CC Skylab, Houston; AOS 9 minutes.

SC Roger, Houston. We're looking for the tanker, but it's very cloudy - I don't think we're going to be able to pick it up.

CC Copy.

CC SPT, Houston.

SPT Go ahead.

CC We see S073 2-Charlie on, but we don't see the experiment recorders on.

SC Roger.

SC It's my fault. Paul's in the shower. (garble) switch for him and then turn the recorders on. Bye.

CC We copy, Skylab.

CC Skylab, Houston.

SC Go ahead.

CC We want you to close the vent on the wardroom window until further notice. May be some - -

SC I've already closed it.

CC Copy; closed.

CC And we're working on procedures to improve it, and we'd like for you to report any conditions such as - Is it warm to touch now? Does it have ice on it? And it may be caused by thermal cycling and breathing through the vent tube.

SC Okay. It's not particularly warm to the touch, and it has ice on it. It's pretty much the way the PLT described it to you several hours ago.

CC We copy. And we're going LOS here. We will have you again at Hawaii at 20:23.

SC Okay.

CC SO73 GAIN switch to LOW, Skylab.

SC Roger.

PAO Skylab Control. We have lost signal at the Vanguard tracking station. It appears from the commentary from the crew that they were unable to get photographs of the burning tanker off the coast of Chili. Those photographs were a target of opportunity. In other words have been specified - we do receive data on short lived events, short lived phenomena from Smithsonian Institution in Massachusetts, and that was apparently one of those things that had been passed along by the Earth resources operations officer. He indicated that that would be a desirable target of opportunity for the handheld camera. It appears though that cloud cover might have interrupted or inteferred with that picture taking. This is Skylab Control at 22 minutes and 56 seconds after the hour, and we will have acquisition next time one hour from now. Opportunity for at Vanguard - I'm sorry, at Hawaii that'll be a very short pass - 54 second pass. They may drop that. The next opportunity after that is 1 hour 27 minutes. Skylab Control, 23 minutes and 15 seconds after the hour.

END OF TAPE

SL-II KC-1041/1
Time: 14:52 CDT, 22:19:52 GMT
6/15/73

TAPE [illegible] Skylab Control at 19 hours 52 minutes 22 seconds Greenwich mean time. We have an unusual surprise for you. Charles Lewis, the off-going flight director, has his coat over his shoulder and is just now exiting from the Mission Control room, headed for building 1 and a briefing, which it looks like now will begin ahead of schedule, at a few minutes before 3 o'clock. We should expect about 3 o'clock for that briefing with Charles Lewis, the off-going flight director. This is a change-of-shift briefing. This is - At the present time the spacecraft is out of range of signal and will continue to be so for the next 30 minutes. This is Skylab Control at 52 minutes 56 seconds after the hour.

END OF TAPE

SL-II MCC043/1
Time: 15:22 CDT, 22:20:22 GMT
6/15/73

PAO Skylab Control we have acquisition of signal and expect to hear a call any moment. We'll be up live in Hawaii.

CC Skylab, Houston. AOS for 1 minute.

SC Hello there.

CC Got a couple of questions here and a bit of information. They have apparently decided that the Marshall shield will not be deployed on Skylab II.

SPT Aw, we just got it out and dusted it off.

CC Copy.

CC And when do you plan the TV tour - at what station passes for our planning purposes?

SPT Oh, we were going to put it on tape.

CC Ah, copy. And could you give us an approximate time of that?

SPT Well, we're trying to work it out - I've got another ATM pass after dinner and Paul's at the console now. It'll probably be a good hour - hour and a half.

CC Maybe uou can kind of tie a string to one of those guys and carry him around for me, Joe.

SPT (Laughter) okay. Can't get into your other thinking (garble)

CC Copy. On the secondary coolant loop in the CSM we want the secondary coolant heater control main A - circuit breaker, panel 5, pulled sometime this evening

SPT Okay.

CDR That's its normal configuration, Houston. I had it in a little while ago during the 7 day CSM housekeeping check. It's now again open for checklist.

CDR Did you read that, Houston?

CC Stand by 1.

CC Go ahead, Pete.

CDR I said I just finished systems housekeeping 7. That breaker is open as it is supposed to be - it's normally open.

CC Okay, Pete. I guess that left us a little breathless here for a second. And we're going to be coming up on the Vanguard at 20:50.

CDR I canleave you breathless. It's been open for 22 days except for the 7 day check.

CC We'll dig some more, Pete.

PAO Skylab Control at 26 minutes and 28 seconds. We had a very long period, much longer than we expected at Hawaii - about 3 minutes before - although the spacecraft communicator William Thornton didn't take advantage of it until actual time and then we had a couple of minutes afterwards. The next acquisition of signal is 23 minutes and 37 seconds from now at Vanguard tracking ship. This is Skylab Control at 26 minutes 52 seconds after the hour.

END OF TAPE

SL-II MC-10447/1
Time: 15:36 CDT, 22:20:36 GMT
6/15/73

FAO Skylab Control at 20 hours 36 minutes and 12 seconds Greenwich mean time. At the present time the spacecraft is traveling over the South Pacific, headed towards the Vanguard tracking site. And we came up to announce that there will be a press conference with Astronaut Story Musgrave to discuss and to watch film of the ED31. That's an educational experiment, that carry-on spores experiment run by a high school student from Rochester, New York. That will be at 4 o'clock in the briefing room of building 1. So in 25 minutes, you will have Story Musgrave available in building 1 to discuss ED31 and to watch the second play of TV-17, TV-18. That's at 4 o'clock - Story Musgrave. This is Skylab Control at 36 minutes 56 seconds after the hour.

END OF TAPE

SL-II MC-1045/1
Time: 15:47 CDT, 22:20:47 GMT
6/15/73

PAO ... Skylab Control at 20 hours 47 minutes and 59 seconds Greenwich mean time. At the present time we are approaching the Vanguard Tracking Station. Because the air-to-ground from Vanguard will interfer with the press conference which is to begin shortly at 4 o'clock, we will be making a recording of that air-to-ground and will play that back at the earliest opportunity. So the voice from Vanguard will be played back at a later time, as will probably the Ascension pass. This is Skylab Control at 48 minutes and 32 seconds after the hour.

END OF TAPE

SL-II MCC046/1
Time: 1515/ CDT; 22:20:57 GMT
6/15/73

PAO Skylab Control at 20 hours 57 minutes and 15 seconds Greenwich mean time. We'd like to remind you that in approximately 2-1/2 minutes, there will be a discussion of experiment ED number 31, bacteria and spores experiment, one of the high school experiments, and it will - the discussion will be conducted during the replay of TV-17 and TV-18, two television versions of that experiment. And Storey Musgrave, the astronaut, will be available for a press conference at 4:00 p.m. central daylight time in the briefing room of building 1 at the Johnson Space Center. This is a reminder. That 4:00 o'clock briefing is just about to begin. This is Skylab Control at 20 hours 57 minutes 59 seconds Greenwich mean time.

END OF TAPE

SL-II MC-1047/1
Time: 16:24 CDT, 22:21:24 GMT
6/15/73

PAO Skylab Control at 21 hours 24 minutes and 42 seconds Greenwich mean time. At this time we will play back the air-to-ground that was recorded over Vanguard and Ascension Tracking Stations. Total air-to-ground was only about a minute and a half. There was very little conversation between the crew and spacecraft communicator, William Thornton, but we will play back that air-to-ground from the last two tracking stations at this time. There is a - to be a briefing with William Schneider at 4:30 in building 1, in the briefing room - William Schneider, Director of the Skylab Program Office. And we will have that briefing shortly after we have replayed this air-to-ground. Here is the air-to-ground.

CC Skylab, Houston. AOS for 10 minutes.
CC Skylab, Houston; AOS for 9 minutes.
SC Roger, Houston.
CC We'll be LOS in 1 minute; Ascension at 21:04.
SC Okay.
CC Skylab, Houston; AOS 9 minutes.
CC Skylab, LOS in one minute. You will have the medical conference at Guam at 21:50.
SC Houston, roger.
CC Go, CDR.
CC Go, CDR.
SC Did you receive the status report?
CC Pete, I'm afraid we've lost you.
SC Okay. (Garble)
PAO This is Skylab Control. After that exciting interchange at the last two tracking stations, they did note during the pass that the next tracking station, Guam, which is 23 minutes from now, will be reserved for a private medical conference, that's to take place at 21:50, or at 5:50 central daylight time. Correct that, at 4:50 central daylight time. That will be the next pass at the Guam Tracking Station for the private medical conference to discuss the present state of the crew's health. This is the daily conference. At 4:30 there is the briefing with William Schneider, Director of the Skylab Program Office, in the building 1 briefing room. This is Skylab Control at 27 minutes 32 seconds after the hour.

END OF TAPE

PAO Skylab Control; 21 hours 53 minutes and 8 seconds Greenwich mean time. We are going to bring up live the Guam commentary, although we have already had acquisition of signal for several minutes at Guam. We do expect a private medical conference to be underway. But we will bring it up live in case that medical conference is completed and they turn the voice back over to Skylab Control. This is Skylab Control at 53 minutes and 30 seconds remaining live for the Guam pass.

CC AOS for 3 minutes.

SC Roger.

SC Got any news tonight?

CC Yeah. I'll give you some in just a second. On the ATM, we've sent a pad up; should be in the teleprinter now, on unattended OPS on H-ALPHA 1, and if you could implement that as soon as possible please.

CC I'm sorry. Delay that. That's after the last pass. That's to be implemented after the last pass.

SC Okay.

CC Not a whole lot in the news tonight. It says the President has named General Weyand as new Chief of - Vice Chief of Staff to succeed General Haig, who is retiring to become White House Chief of Staff. There's something a bit different in New York this evening. Apparently, the purse snatchers jumped a 19-year old girl, grabbed her purse and ran for a taxi, and a hundred people surrounded the taxi and wouldn't let it move until the cops came.

SC (Laughter).

CC Afraid the price of dollars keeps dropping and gold keeps going up, in case anybody has any gold.

SC Got some stawage.

CC Pete might be interested in this. Apparently, they had a small earthquake in Massachusetts 4 or 5 on the Richter scale and it didn't do any real damage.

SC Goodness, that must be the first in quite a while up there.

CC Yeah. I thought things were super stable up there. Poor American tourists are paying 19 percent more than they expected, that is they're getting 19 percent less for their dollars.

CC East and West Germany have applied for membership in the United Nations. We're going LOS here in approximately 30 seconds. We'll have you over Vanguard at 22:27.

SC Roger, Houston. Thank you.

PAO Skylab Control at 21 hours 57 minutes and 50 seconds Greenwich mean time. We have lost signal now at the Guam tracking station. The next acquisition of

signal is approximately 1/2 hour from now at the Vanguard Station - Vanguard Ship off the coast of Argentina. At this time we will be down for the next 30 minutes. I do have an announcement for those of you who are interested in following the details of the entry sims to be performed tomorrow morning. They're expected to begin at approximately 5:48 a.m., that's 10:48 Greenwich mean time. And you may follow them by looking at your original flight plans, we finally have a use for those. The flight plan that was put out earlier in the year is essentially correct. You begin - On the flight plan you have - it has it beginning at approximately 14:30, instead it should begin at approximately 11 hours Greenwich mean time. At that time the phase elapsed time clock will be set to 15:00, as it says in the instructions, start entry sim, instead of 14:37 Greenwich mean time, it will be approximately 11:00 Greenwich mean time. We will set the phase elapsed time clock, that's the clock that's used for timing events - specific events. We will set that at 1500 hours and from there on the flight plan is essentially correct, and that will be the procedure used tomorrow. For those of you who need help, that's page 3-28 in the flight plan. This is Skylab Control at 59 minutes and 26 seconds after the hour.

END OF TAPE

SL-II MO-1049/1
Time: 17:26 CDT, 22:22:26 GMT
6/13/73

PAO Skylab Control at 22 hours 26 minutes and 22 seconds Greenwich mean time. We are just about to have acquisition of signal at Vanguard, and we expect to have two more passes during the rest of the evening, and those will be the last two passes before the crew goes to sleep as we suspect. Should hear a voice of spacecraft communicator, William Thornton calling up to the crew. Flight Director is still Donald Puddy. This shift is on for another three or four hours. This is Skylab Control. We'll stay live for air-to-ground from Vanguard tracking station.

CC Skylab, Houston, AOS 11 minutes.

SC Roger, Houston. We'll be giving you the evening status report.

CC We're standing by Pete, go ahead.

SC Okay, the CDR ate everything plus two butter cookies. Caught me. The SPT ate everything except one coffee. PLT ate everything except corn and bread with dinner, coffee and his snack. He didn't have - he had a Delta H20 plus 1.0 and an optional salt of 2.5 and I'm sorry, the CDR had his optional salt, 10.0.

CC We copy that, Pete.

SC Okay. Photolog day 166, 16 millimeter (garble) 35 millimeter CI30, frame count 44; CI28, frame count 50; 70 millimeter CX06, 103. No EREP. Drawer A: A-1 02 Charlie India 12, 100 percent; Charlie India 05. A-2 is 03 Charlie India 06, 35; Charlie India 03. A-3 is 06, Charlie India 13, 100 percent; Charlie India 10. A-4 is 05, no supply, no film; Charlie India 11 to tape dump. Floating, 07, Charlie India 0966 (Garble) 003. The flight plan was completed as scheduled today. In addition we did 552-1. We have three remaining to go. We'll get them tomorrow. Can't think of anything else. As soon as Joe gets done with his ATM pass, we're going to do the TV tour, one of them, and go to bed. So, it'll be on the tape in about an hour - an hour and a half.

CC Copy that, Pete.

CC Pete, the crew questions should be coming up in a moment. If you don't have time to get to them this evening we'll catch them tomorrow.

SC Okay.

SC Bill, I want to verify the position of a couple of circuit breakers down here in the workshop. The thermal control system logic breakers are still open. Is that what you intend - where you all thought they were? Is that you where you want them?

CC Stand by a half on that one Paul.

SC Okay.

CC That is affirm, Paul. We want those out.

SC Okay. The thing that surprised me after we got back after EVA, and I wasn't aware of it, I could not turn the fans ON from the workshop until I'd closed those breakers. Then once we got the fans going, opening the breakers had no effect, but apparently after those power (garble) turn them on when they're in the OWS position in the airlock. I say that Bill, because it's a surprise to me. You may pass it on to (Garble) (Garble). I don't know if he knows it or not.

CC Okay, and we're looking at it to confirm that it's the way its supposed to go down here.

SC Okay, why don't you confirm with your drawing, that's not the way it works.

CC Okay.

CC Did you have another one, Paul?

SC Thank you, that's all, Bill.

CC Okay, and be advised that no further consideration is being given to additional EREP pass - -

END OF TAPE

SPT — Negative, that's all, Bill.
CC — Okay, and be advised that no further consideration is being given to additional EREP passes.
SPT — Okay, thank you.
CC — LOS in 1 minute. We'll have you at Ascension at 22:41. And SPT, Houston.
CC — And it is SPT that you may be through at the console. The 54 filter goes to 1 and stowage. And H Alfa, should be placed in unattended ops for the pab, that went up earlier.
SPT — Bill, we did not - I didn't find any pad in there. You had better tell us what you want.
CC — Okay, we'll catch you on this next pass coming up.
PAO — Skylab Control at 22 hours 39 minutes Greenwich mean time. We've lost signal at the Vanguard tracking station, and we expect to acquire again at Ascension in approximately 2 minutes and 20 seconds. The question sent up to the crew included questions on operations of the EREP, stowage of film, some questions regarding the stowage, list number of those, and also a question on the redesign of waste management compartment foot restraint. They'd like the crew to make suggestions on that, to come up with some ideas on that. They did indicate that they would like to ask later on some questions about Earth Resources so that they can use these in the training of the Skylab III crew, the next Skylab crew to go up. Tomorrow's flight plan calls for an early morning motion sensitivity run of the M131, or human vestibular, or balance function. The M131 involves sense of balance that human beings can feel in space. Today the oculo gyro illusion portion of M131 was performed. This oculo gyro illusion is an illusion produced by eye movements. It's used to measure sensitivity to very slight movement in the semicircular canals. Because of the illusion, you can measure sensitivity levels much lower than would normally be reported by a crew member. Permission has been given for rotation speeds up to 30 revolutions per minute tomorrow. That's near the maximum speed of 35 revolutions per minute on the rotating literature. And during the motion sensitivity, or motion sickness phase of M131. Paul Weitz will be the subject rotated in the spinning chair. So far the astronauts have shown no indication of motion sickness even at speeds well above those causing sickness on Earth. Tomorrow's run will be at the highest speed so far. This experiment begins at 4:20 a.m. central daylight time tomorrow. Most of the morning tomorrow will

be decoupled with a simulation of maneuvers for splash down. This simulation or run through begins before undocking of the command module and runs through the deorbit burn. We're now coming up on acquisition of signal at Ascension, so we will remain live for air to ground from Ascension.

CC — Skylab, Houston, AOS 7 minutes.

CDR — Roger, Houston.

CC — And we will send you another copy of that pad up during thic pass. That's for the H-Alpha 1 unattended obs.

CDR — Can you tell me what it is?

CC — Do you want me to read it, Pete?

CDR — Yeah, if you can right here. You might as well pull it down.

CC — To allow H Alfa 1 picture taking and during unattended observations at the power down, configure ATM as follows; H Alfa 1, camera power switch ON, H Alfa 1, door switch OPEN, H Alfa 1 frames per minute switch 1, VERIFY H Alfa 1, night innerlock switch override, H Alfa 1, auto switch - -

END OF TAPE

SL-II MC-1051'S
Time: 17:42 CDT 22:22:42 GMT
6/15/73

CC M-Alpha 1, AUTO switch. AUTO. To return to normal M Alpha 1 OP. We'll send you this pad up tonight and this remainder will be on it.

CDR Okay.

PAC Skylab Control. We have a brief loss of signal. We will again pick up the station immediately at Canary Island and then at Madrid. We'll remain live for this air to ground.

PAO Mission Control has reported - this is Skylab Control - Mission Control has reported that the crew at the present time is involved in doing a tour of the spacecraft for television. Doing it live for dumping there and for that reason there will be very little communications during this period. They are running through the various parts of the spacecraft and attempting to record that on television. But we will remain live for any possible air to ground during these last two tracking stations.

CC Skylab, one minute to LOS for bedtime and we will be dumping the tape recorder at Guam at 23:25. From the quiet sounds of things down here, you must have had a very busy day up there.

CDR We're doing that (garble) right now. And we'll see you in the morning. Thank you.

CC Good night.

END OF TAPE

SL-II MC-1052/1
Time: 18:00 CDT 22:30:00 GMT
6/15/73

PAO This is Skylab Control at 23 hours 1 minute and 20 seconds, Greenwich mean time. We have finally lost signal at the Madrid tracking station. We are not expected to acquire any data again for 23 minutes. The crew at this time been instructed to go to sleep. They've indicated as we lost signal, that they were completing their tour of the spacecraft with the television camera, and we do not expect to hear from them again during the evening. Most of tomorrow morning, in addition to the M131 activities to begin at 4:20 a. m. will be occupied with a simulation of maneuvers for splashdown. The simulation or run through will begin before undocking of the Command Module in the simulation splashdown procedures and will run through the deorbit burn. During such a simulation the crew practices all the necessary activities just as they will occur during the hours before splashdown next Friday morning. But no actual movement of the Command Module takes place. Simulations are essentially verbal going throughs of necessary activities with the crew acting out their roles in a kind of rehersal. The crew was informed during this past series of communications that they would have no further EREP activity during the mission. That's Earth Resourses experiment package activities. This had been expected, but some consideration was requested for an additional EREP pass, and this had been mentioned to the crew earlier. Flight planners decided today that insufficient time was available for an additional pass, which would require several man hours of effort. So the crew has said goodnight at 6:00 p.m. and they will be awakened tomorrow morning at 2:00 a. m. central daylight time, after 8 hours of sleep. This will adjust the Skylab sleep schedule to 6:00 p. m. sleep and 2:00 a. m. wakeup for the remainder of the flight, with the exception of that final day before splashdown. That's an attempt to change the circadian rychum or the sleep habits of the space crew so that they will be in good shape for that short period of sleep the final night before they splashdown. We expect no further communications from the spacecraft. This will be the last report until 2:00 a. m. This is Skylab Control at 3 minutes 35 seconds after the - I'm sorry. One final message. We do have a report from the surgeon, following the Guam pass Skylab crewmen are still enjoying an excellent state of physical well-being and a high level of morale. That's the private medical conference report from the surgeon. This is Skylab Control, signing off until 2:00 a. m. tomorrow morning at 23 hours 3 minutes and 59 seconds, Greenwich mean time.

END OF TAPE

SL-II MC-1096/2
Time: 17:38 CDT 23:22:38 GMT
6/15/73

CC Skylab; LOS in 1 minute for the night. There will be a tape recorder dump at Canary at 23:41. We'll see you in a couple of days.

CDR Okay Bill, good night.

PAO Skylab Control at 22 hours 52 minutes 39 seconds Greenwich mean time. We have lost signal at Guam, and we do not again expect to hear from the crew. The good night from William Thornton was given here. He said see you in a couple of days. Spacecraft communicator Thornton is off duty tomorrow, as that shift is, the shift that Don Puddy Flight Director, shift is off duty for the next day, and will not be back on until the following day. So, we do have a good night for the crew at Guam and do not expect to hear from them again. They are scheduled to begin their sleep period in approximately 7 minutes. The information about the tape recorder dump that was given to them. There will be a dump at approximately 41 minutes after the hour at the Canary Island pass. The reason for that information is that in previous nights the crew has remained up beyond their normal sleep period, and has been using the tape recorder for recording messages. And it is impossible for a message to be recorded on the tape recorder at the same time that the tape recorder is in the play back mode for dumping it at a tracking station. So, that's good night to the crew. And this is the final broadcast for Skylab Control until tomorrow morning at 2:00 a.m. Skylab Control signing off at 53 hours - 53 minutes and 54 seconds after the hour.

END OF TAPE